

## RAW SEQUENCE LISTING ERROR REPORT



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/079,134  
Source: C1PE  
Date Processed by STIC: 315/02

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.  
PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)  
PATENTIN 3.0 e-mail help: [patin3help@uspto.gov](mailto:patin3help@uspto.gov) or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>), EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:  
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7<sup>th</sup> Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202  
Or  
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

Raw Sequence Listing Error Summary

01PE

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 10/079, 134

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1  Wrapped Nucleic  
   Wrapped Aminos  
The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to 3; this will prevent "wrapping."

2  Invalid Line Length  
The rules require that a line not exceed 72 characters in length. This includes white spaces.

3  Misaligned Amino  
  Numbering  
The numbering under each 3<sup>rd</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.

4  Non-ASCII  
The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.

5  Variable Length  
Sequence(s)  contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <20>-<23> section that some may be missing.

6  Patentin 2.0  
  "bug"  
A "bug" in Patentin version 2.0 has caused the <20>-<23> section to be missing from amino acid sequences(s)  . Normally, Patentin would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <20>-<23> section to the subsequent amino acid sequence. This applies to the mandatory <20>-<23> sections for Artificial or Unknown sequences.

7  Skipped Sequences  
  (OLD RULES)  
Sequence(s)  missing. If intentional, please insert the following lines for each skipped sequence:  
(2) INFORMATION FOR SEQ ID NO:X (insert SEQ ID NO where "X" is shown)  
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
(ii) SEQUENCE DESCRIPTION:SEQ ID NO:X (insert SEQ ID NO where "X" is shown)  
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.

8  Skipped Sequences  
  (NEW RULES)  
Sequence(s)  missing. If intentional, please insert the following lines for each skipped sequence.  
<21> sequence id number  
<400> sequence id number  
000

9  Use of n's or Xaa's  
  (NEW RULES)  
Use of n's and/or Xaa's have been detected in the Sequence Listing.  
Per 1.823 of Sequence Rules, use of <20>-<23> is MANDATORY if n's or Xaa's are present.  
In <20> to <23> section, please explain location of n or Xaa, and which residue n or Xaa represents.

10  Invalid <213>  
  Response  
Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <20>-<23> section is required when <213> response is Unknown or is Artificial Sequence

11  Use of <220>  
Sequence(s)  All missing the <220> "Feature" and associated numeric identifiers and responses.  
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)

12  Patentin 2.0  
  "bug"  
Please do not use "Copy to Disk" function of Patentin version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

13  Misuse of n  
n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.



Does Not Comply OIPE  
Corrected Diskette Needed

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/079,134

DATE: 03/05/2002  
TIME: 14:23:06

Input Set : A:\10014010.ST25.txt  
Output Set: N:\CRF3\03052002\J079134.raw

→ The type of errors shown exist throughout  
the Sequence Listing. Please check subsequent  
sequences for similar errors.

3 <110> APPLICANT: Nikiforov, Theo T.  
5 <120> TITLE OF INVENTION: Methods and Systems for Identifying Nucleotides by Primer Extension

7 <130> FILE REFERENCE: 100/14010  
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/079,134  
C--> 9 <141> CURRENT FILING DATE: 2002-02-20  
9 <150> PRIOR APPLICATION NUMBER: 60/270,667  
10 <151> PRIOR FILING DATE: 2001-02-22  
12 <160> NUMBER OF SEQ ID NOS: 12  
14 <170> SOFTWARE: PatentIn version 3.1  
16 <210> SEQ ID NO: 1  
17 <211> LENGTH: 22

18 <212> TYPE: DNA  
19 <213> ORGANISM: Synthetic ① invalid response, see error summary sheet items 10 + 11  
21 <220> FEATURE: ⑥ must also explain genetic source in <223>  
22 <221> NAME/KEY: misc\_feature  
23 <223> OTHER INFORMATION: Fluorescein labeled thymidine residue  
26 <220> FEATURE:  
27 <221> NAME/KEY: misc\_feature  
28 <222> LOCATION: (22)..(22)  
29 <223> OTHER INFORMATION: Fluorescein labeled thymidine residue  
32 <400> SEQUENCE: 1

W--> 33 ctgcattat gttaggcatt an 22  
36 <210> SEQ ID NO: 2  
37 <211> LENGTH: 22  
38 <212> TYPE: DNA  
39 <213> ORGANISM: Synthetic Some errors  
41 <220> FEATURE:  
42 <221> NAME/KEY: misc\_feature  
43 <222> LOCATION: (22)..(22)  
44 <223> OTHER INFORMATION: Fluorescein labeled cytosine residue  
47 <400> SEQUENCE: 2

W--> 48 ctgcattat gttaggcatt an 22  
51 <210> SEQ ID NO: 3  
52 <211> LENGTH: 22  
53 <212> TYPE: DNA  
54 <213> ORGANISM: Synthetic Some errors  
56 <220> FEATURE:  
57 <221> NAME/KEY: misc\_feature  
58 <222> LOCATION: (22)..(22)  
59 <223> OTHER INFORMATION: fluorescein labeled thymidine residue  
62 <400> SEQUENCE: 3

W--> 63 agacttcca cgtggaccag gn 22  
66 <210> SEQ ID NO: 4

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/079,134

DATE: 03/05/2002  
TIME: 14:23:06

Input Set : A:\10014010.ST25.txt  
Output Set: N:\CRF3\03052002\J079134.raw

67 <211> LENGTH: 23  
68 <212> TYPE: DNA  
69 <213> ORGANISM: Synthetic Some errors  
71 <220> FEATURE:  
72 <221> NAME/KEY: misc\_feature  
73 <222> LOCATION: (22)...(22)  
74 <223> OTHER INFORMATION: fluorescein labeled thymidine residue  
77 <220> FEATURE:  
78 <221> NAME/KEY: misc\_feature  
79 <222> LOCATION: (23)...(23)  
80 <223> OTHER INFORMATION: fluorescein labeled cytosine residue  
83 <400> SEQUENCE: 4  
W--> 84 aggacttcca ctggaccag gnn 23  
87 <210> SEQ ID NO: 5  
88 <211> LENGTH: 30  
89 <212> TYPE: DNA  
90 <213> ORGANISM: Synthetic Some errors  
92 <400> SEQUENCE: 5  
93 ttggcatgt aatgcctaac ataatggcag 30  
96 <210> SEQ ID NO: 6  
97 <211> LENGTH: 30  
98 <212> TYPE: DNA  
99 <213> ORGANISM: Synthetic Some errors  
101 <400> SEQUENCE: 6  
102 ttggcatat aatgcctaac ataatggcag 30  
105 <210> SEQ ID NO: 7  
106 <211> LENGTH: 31  
107 <212> TYPE: DNA  
108 <213> ORGANISM: Synthetic Some errors  
110 <400> SEQUENCE: 7  
111 acggtgttcg cttgttccac gtggaaagtcc t 31  
114 <210> SEQ ID NO: 8  
115 <211> LENGTH: 31  
116 <212> TYPE: DNA  
117 <213> ORGANISM: Synthetic Some errors  
119 <400> SEQUENCE: 8  
120 acggtgttcg cttgttccac gtggaaagtcc t 31  
123 <210> SEQ ID NO: 9  
124 <211> LENGTH: 87  
125 <212> TYPE: DNA  
126 <213> ORGANISM: Synthetic Some errors  
128 <400> SEQUENCE: 9  
129 cgcaccaacta gtgccaatcg caccaaaaaca ccctttggca tgtaatgcct aacataatgg 60  
131 caggaggatgc caaaggatga gcaactta 87  
134 <210> SEQ ID NO: 10  
135 <211> LENGTH: 87  
136 <212> TYPE: DNA  
137 <213> ORGANISM: Synthetic Some errors  
139 <400> SEQUENCE: 10

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/079,134

DATE: 03/05/2002  
TIME: 14:23:06

Input Set : A:\10014010.ST25.txt  
Output Set: N:\CRF3\03052002\J079134.raw

140	cgcaccacta	gtgccaatgg	cacccaaaca	ccctttggca	tataatgcct	aacataatgg	60
142	caggagatgc	caaagagtaa	gcactta				87
145	<210>	SEQ ID NO:	11				
146	<211>	LENGTH:	21				
147	<212>	TYPE:	DNA				
148	<213>	ORGANISM:	Synthetic			Some errors	
150	<400>	SEQUENCE:	11				
151	taagtgcctt	ctctttgcaa	c				21
154	<210>	SEQ ID NO:	12				
155	<211>	LENGTH:	21				
156	<212>	TYPE:	DNA				
157	<213>	ORGANISM:	Synthetic			Some errors	
159	<400>	SEQUENCE:	12				
160	cgcaccacta	gtgccaatgg	c				21

VERIFICATION SUMMARY  
PATENT APPLICATION: US/10/079,134

DATE: 03/05/2002  
TIME: 14:23:07

Input Set : A:\10014010.ST25.txt  
Output Set: N:\CRF3\03052002\J079134.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No  
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:33 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:48 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2  
L:63 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:84 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4